

FEDOTKIN, I.M.; TOBILEVICH, N.Yu.

Hydraulic and thermal irregularities of the pipe bundles of
evaporation and concentration apparatus. Izv.vys.ucheb.zav.;
pishoh.tekh. no.3:123-128 '62. (MIRA 15:7)

1. Kiyevskiy tekhnologicheskii institut pishchevoy promyshlennosti,
kafedra spetsoborudovaniya.
(Evaporating appliances)

FEDOTKIN, I.M.

Effect of the cross section of circulation tubes on the
circulation speed of sugar solutions in evaporating apparatus.
Trudy KTIPP no. 85:60-65 '62. (MIRA 16:5)
(Evaporating appliances) (Sugar manufacture)

TOBILEVICH, N.Yu.; FEDOTKIN, I.M.

Effect of various factors on the swelling of the boiling juice
level into the space of the evaporation apparatus above the juice.
Trudy KTIPP no.25:88-89 '62. (MIRA 16:5)
(Evaporating appliances) (Sugar manufacture)

FEDOTKIN, I.M.

Determining the hydrodynamic depression and height of the
boiling point in vertical evaporating apparatus. Trudy
KTIPP no.27:120-132 '63. (MIRA 17:5)

FEDOTKIN, I.M., inzh.

Hydrodynamic characteristics of circulation-type and direct-flow
evaporators operating without flooding of the upper tube lattices.
Izv.vys.ucheb.zav.; energ. 8 no.3:83-90 Mr '65.

(MIRA 18:4)

1. Kiyevskiy tekhnologicheskij institut pishchevoy promyshlennosti.

FEDOTKIN, I.M., kand. tekhn. nauk, dotsent

Various forms of dropping motion in boiling tubes of vertical
evaporators. Izv. vys. ucheb. zav.; energ. 7 no.12:74-83 D '64.

(MIRA 18:2)

1. Kiyevskiy tekhnologicheskiy institut pishchevoy promyshlennosti.
Predstavlena kafedroy spetsial'nogo oborudovaniya.

KONSTANTINOV, S.M., kand. tekhn. nauk; PEDOTKIN, I.M., kand.
tekhn. nauk

Rated relationship for the calculation of the values of
the thermophysical characteristics of molasses stillage.
Pishch. prom. no.1:179-183 '65. (MIRA 18:11)

FEDOTKIN, I.M., kand. tekhn. nauk; GANDELYUK, M.F., kand. tekhn. nauk;
RUDENKO-GRITSYUK, G.Ye., inzh.

Effect of the physical properties of the liquid on the height
of the real level of gas bubbling through a liquid. Fizhen. sver.
no.2:127-131 '65. (MIRA 13:11)

1. Kiyevskiy tekhnologicheskiy institut pishchevoy promyshlennosti.

YUDITSKIY, D.G. [Iudyts'kiy, D.G.]; **FEDOTKIN**, I.M.

Thermal and hydrodynamic testing of a tubular industrial cereal
cooker. Khar. prom. no.3:28-33 JI-S '65. (MIRA 18:9)

ACC NR: AR6023370

SOURCE CODE: UR/0274/66/000/003/ 5/A006

AUTHOR: Fedotkin, A. N.

TITLE: Some problems in the theory of statistical games and the optimal reception from communication channels

SOURCE: Ref. zh. Radiotekhnika i elektrosvyaz', Abs. 3A58

REF SOURCE: Uch. zap. Mordovsk. un-t, vyp. 30, 1965, 14-25

TOPIC TAGS: game theory, signal noise separation, information theory

ABSTRACT: A systematic utilization of the theory of games for the purposes of information-reception problem is attempted; the results of such an approach are discussed; the optimal reception of a binary code is calculated. The procedure of message reception is represented as a statistical game in which the observer tries to select his best action in the sense that it must correspond to the present true state; in his inevitable guessing errors, he tries to ensure a minimal loss of pay-off. The principle guiding the observer in the selection of his strategy is clarified. With known probabilities of states of the information source, the action can be based on minimization of average losses. The corresponding criterion and strategy turned out to be Bayesian. An examples of the detecting a constant-amplitude signal in a Gaussian noise is used as an illustration. Bibliography of 3 titles.
L. S. [Translation of abstract]

SUB CODE: 17, 09
Card 1/1

UDC: 621.391.16

FEDOTKIN, S.N.

35292. Prizmaticheskiy Svetic'nik dlya osveshcheniya ulits. nauch. Trudy
(Akad. Kommunal. Khoz-Ea Im. Pamfilova), vyp. 4-5, 1949, S. 67-73

SO: Letopis' Zhurnal'nykh Statey. Vol. 34, 1949 Moskva

1. KUTY IV, IV.
ZIL'BERBIAT, Ya.B.; OSTROVSKIY, M.A.; FEDOTKIN, S.N.; AKATOVA, V.G., re-
daktor; GUROVA, O.A., tekhnicheskii redaktor.

[Layout for effective city lighting] Ratsional'nye skhemy osveshchenia
gorodov. Moskva, Izd-vo Ministerstva kommunal'nogo khoziaistva RSFSR.
1954. 50 p. (MIR 8:1)
(Street lighting)

"APPROVED FOR RELEASE: Thursday, July 27, 2000

CIA-RDP86-00513R00041272

APPROVED FOR RELEASE: Thursday, July 27, 2000

CIA-RDP86-00513R00041272(

FEDOTKINA, A. I. Cand ~~Agri~~ Agr Sci -- (diss) "The ^(Goryn') ~~simmenthalized~~ cattle
of ^{the} ~~Belorussian~~ Poless(ys and prospects of perfecting it." Minsk, 1959
17 pp (All-Union Sci Res Inst of Animal Husbandry. Department of ^{livestock} ~~cattle~~ Raising),
150 copies (KL, 50-59, 128)

RAL'KO, V.A., Geroy Sotsialisticheskogo Truda; LOBANOV, A.P.; KURLYPO, M.F.;
YANUSHEVSKAYA, M.S.; FEDOTKINA, A.I.

Introducing scientific farm management on the "Stalin" Collective
Farm. Zemledelie 7 no.8:6-11 Ag '59. (MIRA 12:10)

1.Predsedatel' kolkhosa imeni Stalina, Pinskogo rayona, Brestskoy oblasti (for Ral'ko). 2.Nauchno-issledovatel'skiy institut ekonomiki i organizatsii sel'skokhozyaystvennogo proizvodstva Akademii sel'skokhozyaystvennykh nauk BSSR (for Lobanov, Kurlypo, Yanushevskaya). 3.Belorusskiy nauchno-issledovatel'skiy institut zhiivotnovodstva (for Fedotkina).

(White Russia--Collective farms)

FEDOTKINA, R.Ya.

Effect of preplanting treatment of seeds with the trace elements manganese and chromium and hydrogen peroxide on the plant uptake of ash elements and the chemical composition of corn grain. Izv. Alt. otd. Geog. ob-va SSSR no.5:142-144 '65.
(MIRA 18:12)

1. Gorno-Altayskiy pedagogicheskiy institut.

FEDOTOV, A., dots.

Agronomist Karaerov's valuable suggestion. Nauka i pered.op.v.
sel'khoz. 9 no.12:54-55 D '59. (MIRA 13:4)

1.Saratovskiy ekonomicheskij institut.
(Sugar beets)

FEDOTOV, A., kapitan-leytenant

For each, a matter according to spirit and abilities. Komm.
Vooruzh. Sil 46 no.20:59-61 O '65.

(MIRA 18:12)

BARDIN, I.P., akademik, otv.red. [deceased]; LYUDOGOVSKIY, G.I., zam. otv.red.; PUSTOVALOV, L.V., red.; FEDOTOV, A.A., red.; GERBOV, V.L., red.; OVCHININSKIY, N.V., red.; SHLEPOV, V.K., red.izd-va; SUSHKOVA, L.A., tekhn.red.

[Development of ferrous metallurgy in areas to the east of the Lake Baikal] Problemy razvitiia chernoi metallurgii v raionakh vostochnoe oz. Baikal. Moskva, 1960. 190 p.

(MIRA 14:2)

1. Akademiya nauk SSSR. Sovet po izucheniyu proizvoditel'nykh sil.
 2. Chlen-korrespondent AN SSSR (for Pustovalov).
- (Siberia, Eastern—Iron industry)

FIGURE 1. BOOK PRODUCTION BY VOLUME

Arbeitsjahr 1968. Soweit es hinsichtlich produktionsrichtiger still
Carnegie Hall, (Paris Metallurg) Moskau, 14.10.1960
2737. (Soweit es hinsichtlich produktionsrichtiger still
Broschüre überliefert. 2,000 copies printed.

[illegible]

PURPOSE: This collection of papers is intended to furnish information on industrial resources in Eastern Siberia and to provide a basis for future developmental planning in the field of ferrous metallurgy.

CONTENTS: The collection is a summary of the proceedings of the Ferosus Metallurgy Section of the Joint Conference of Representatives of the Academy of Sciences of the USSR, the Soviet Planning Commission, and the Council of Ministers. The collection deals with the most important problems of the development of ferrous metallurgy in the USSR, with the most acute needs of development in Eastern Siberia: 1) Natural resources, 2) the fuel base, 3) prospects for the development of ferrous metallurgy, and 4) problems in the development of electro metallurgy. A list of the 111 members of the Section with their affiliations is given in the Appendix. References accompany several of the articles.

MAKAROV, Y. S. Present Situation and Prospects of Villagization of Territorial Army in Eastern Siberia 200

Reviews of Addresses on Reports Polling With the Development of
Personality in Eastern Siberia 806

**SECTION IV. PROCEEDS IN THE INTEREST OF
INVESTMENT IN UNITED STATES**

Robert, A. Jr. Prospects for the Development of Electric Pig Iron Production in Eastern Siberia 213

Abstracts, A.I. and A.B. Inventor. On the Problem of Conversion of Electric Cast Iron Into Steel. 227

~~Hydrox. Lab.~~ Efficiency of Hydrogen Production From Flow Gases
of Electric Low-Grade Furnaces

Case 7/6

FEDOTOV, A.A.; BANNYY, N.P.; ROMENETS, V.A.

Analyzing the changes in the structure of the fuel balance of
metallurgical plants in connection with the use of natural gas.

Izv. vys. ucheb. zav.; chern. met. 6 no.11:230-240 '63.

(MIRA 17:3)

FEDOTOV, A.A.; BANNYY, N.P.; ROMENETS, V.A.

Technical progress and tendency toward the full use of fuel
in metallurgical plants. Izv. vys. ucheb. zav.; Chern. met.
no.1:201-208 '64. (MIRA 17:2)

Steel & alloys
1. Moskovskiy institut stali i splavov.

FEDOTOV, A.A.

Chemicalization of the national economy and metallurgy. Izv. vys.
uobsh. zav.; chern. met. 7 no.3:5-6 '64. (MIRA 17:4)

FEDOTOV, A. A.

Potentialities in metallurgy for the chemicalization of the
national economy. Izv. vys.ucheb.zav.; chern.met.7 no. 5:
5-6 '64. (MIRA 17:5)

BANNYY, N.P.; ROMENETS, V.A.; FEDOTOV, A.A.

Methods of evaluating fuel; on the basis of gas fuel. Stal' 24
no.12:1134-1130 D '64. (MIRA 18:2)

1. Moskovskiy institut stali i splavov.

FEDOTOV, A. F.

S/908/62/000/000/004/008
B163/B180

AUTHORS: Gagin, Ye. N., Kaminir, L. B., Molchanov, S. S.,
Orlovskiy, G. N., Pisarev, V. Ya., Pyshkin, B. N.,
Fedotov, A. F., Yakimenko, M. N.

TITLE: System for electron injection into the chamber of the
680 Mev synchrotron

SOURCE: Uskoritel' elektronov na 680 Mev; sbornik statey. Ed. by
Z. D. Andreyenko. Moscow, Gosatomizdat, 1962. 41-49

TEXT: The method is the same as in the Dubna 10 Bev proton synchrotron. Particles of constant energy are injected into the magnetic field of the first quadrant almost at right angles to the magnet radius; injection is stopped on reaching the equilibrium orbit of the chamber center, and the accelerating field is switched on direct injection is impossible, due to the design of the accelerator magnet and the high-voltage injector (injection energy 0.8 Mev). The electron beam from the Van de Graaff generator is first deflected by a magnetic 60° sector field and then injected by three pairs of deflection plates for a total deflection of

Card 1/2

System for electron injection ...

S/908/62/000/000/004/008
B165/B180

30°, into the synchrotron chamber. Between the Van de Graaff exit and the magnetic deflector there is a magnetic corrector consisting of two pairs of magnetic polepieces to correct the eccentricity of the accelerated beam with respect to the geometrical axis. Directly behind the magnetic deflector is a 1.5 kv electric deflector which can be used to select short pulses of 1 μ sec. When switched off, the beam passes through a horizontal slit diaphragm. The alignment can be checked on two fluorescent screens. A double electrostatic corrector and two capacitors adjust the position and angle of the beam in the deflectors of the injector, which are in one of the straight sections of the accelerator. Each plate can be separately adjusted by translation and rotation from outside without destroying the vacuum. The radius of curvature of the orbit in this deflection system is 60 cm. The voltage across each pair of plates can be controlled separately. A rough estimate shows that an instability of $2 \cdot 10^{-3}$ rad in the radial and $5 \cdot 10^{-3}$ rad in the axial component of the injection angle produce an intensity loss of 20%. The instabilities of the supply sources are of the order of 0.01 to 0.06%. Circuit diagrams are given for the d.c. amplifier and the rectifier for the reference voltage. There are 5 figures and 1 table.

Card 2/2

FEDOTOV, A. F.

S/908/62/000/000/005/008
B163/B180

AUTHORS: Kaminir, L. B., Molchanov, S. S., Orlovskiy, G. N.,
Pyshkin, B. N., Fedotov, A. F., Yakimenko, M. N.

TITLE: Radiotechnical system of the 680 Mev accelerator

SOURCE: Uskoritel' elektronov na 680 Mev; sbornik statey. Ed. by
Z. D. Andreyenko. Moscow, Gosatomizdat, 1962. 50-57

TEXT: In the first acceleration stage, when the electron velocity is still low, a broad-band accelerating device is used consisting of a 55 cm drift tube and a section of coaxial line, whose input conductance compensates the capacitance of the tube. The equivalent oscillatory circuit has a wave resistance of 65 ohm. The circuit is shunted by a resistance to broaden the transmission band. The acceleration per orbit is 250 v, the HF power 2 kw; in the first 10 nsec the frequency increases from 19.2 - 20.4 mops. In the second stage, acceleration occurs with a constant frequency of 20.4 Mops, using a toroidal resonator with a Q-factor of 2000, and wave resistance 6 ohm. Acceleration per orbit is 15 kv, and HF power dissipation 20 kw. The radiation loss in the final stage is

Card 1/2

Radiotechnical system of the ...

S/908/62/000/000/005/008
B163/B180.

about 10 kev per orbit. The timing of the different accelerator elements (injection pulse, magnetising current, first and second accelerating stage) is controlled by pulses connected to delay circuits. A system of signal electrodes indicates the intensity and position of the beam during acceleration. There are 6 figures.

Card 2/2

FEDOTOV, A. F. Cand Med Sci -- ("Age-related histomorphology of arteries of the muscular type in humans." Kiev, 1959. 16 pp (Kiev Order of Labor Red Banner Med Inst in Academician A. A. Bogomolets), 200 copies (KL, 52-59, 187)

-150-

BENDET, Ya.A. (Kiyev, ul.Gor'kogo, d.8.kv.15); FEDOTOV, A.P.

Clinical morphological observation of the results of ligation of the right pulmonary artery in a tuberculosis patient. Grud. khir. 2
no.5:98-99 8-0 '60. (MIRA 16:5)

1. Iz kliniki torakal'noy khirurgii (sav. - prof. N.M.Amosov) i patologomorfologicheskogo otdela (sav. - starshiy nauchnyy sotrudnik V.F.Yur'yeva) Ukrainskogo nauchno-issledovatel'skogo instituta tuberkuleza imeni akademika V.G.Yanovskogo (dir. - dotsent A.S. Mamolat).

(PULMONARY ARTERY--LIGATURE)

GUBANOV, A.G.; SEVEROV, V.S.; OSINTSEVA, V.P.; FEDOTOV, A.F.

Use of porolon plumbage in partial resections of the lungs in tuberculosis. Vest.khir. no.5:46-51 '61. (MIRA 15:1)

1. Iz Instituta tuberkuleza (dir. - prof. N.A. Shmelev) AMN SSSR i Ukrainskogo nauchno-issledovatel'skogo instituta tuberkuleza (dir. - kand.med.nauk A.S. Mamolat).
(LUNGS—SURGERY) (TUBERCULOSIS) (PLASTICS IN MEDICINE)

BEREZOVSKIY, K.K.; FEDOTOV, A.F.

Morphological changes in the bronchi at the level of surgical
incision with conservative pulmonary resection. Vrach. delo no.5:
62-68 My '61. (MIRA 14:9)

1. Ukrainskiy nauchno-issledovatel'skiy institut tuberkuleza imeni
skademika F.G.Yanovskogo.
(BRONCHI—SURGERY) (TUBERCULOSIS)

FEDOTOV, A.F.; BEREZOVSKIY, K.K.

Morphological reactions in the area of the application of a tantalum suture on the lung. Trudy NIIKHAI no.5:65-73 '61. (MIRA 15:8)

1. Iz Ukrainського nauchno-issledovatel'skogo instituta tuberkuleza im. akad. F.G.Yanovskogo (g.Kiyev).
(SUTURES) (LUNGS--SURGERY)

GUBANOV, A.G., dotsent; FEDOTOV, A.F.

Intrapleural plombage with porolon in association with pulmonary
resection. Probl.tub. 39 no.3:44-49 '61. (MIRA 14:5)

1. Iz Ukrainskogo nauchno-issledovatel'skogo instituta tuberku-
leza imeni F.G. Yanovskogo (dir. - kand.med.nauk A.S. Mamolat).
(LUNGS—SURGERY) (LUNGS—COLLAPSE)

FEDOTOV, A.P., kand.med.nauk

Morphological changes in a lung following the ligation of the
lung artery. Sbor.nauch.trud.Kiev.okrzh.voen.gosp. no.4:64-
68 '62. (MIRA 16:5)
(TUBERCULOSIS) (PULMONARY ARTERY—LIGATURE)

KOGOSOV, Yu.A.; FEDOTOV, A.F. (Kiyev)

Frequency and pathogenesis of pulmonary hemorrhages and
hemoptysis in tuberculosis. Vrach. delo no.12:22-25
D '63. (MIRA 17:2)

1. Khirurgicheskaya klinika (sav. - chlen-korrespondent
AMN SSSR, prof. N.M. Amosov) i patologoanatomicheskoye
otdeleniye (sav. - starshiy nauchnyy sotrudnik V.F.
Yur'yeva) Ukrainskogo nauchno-issledovatel'skogo instituta
tuberkuleza i grudnoy khirurgii im. akad. F.G. Yanovskogo.

BERMAN, Lev Solomonovich; FEDOTOV, A.G., inzh., red.; GVIRTIS, V.L.,
tekhn.red.

[Calculation of transients in transistors with large signals;
lecture transcription] Raschet perekhodnykh protsessov v
transistorakh pri bol'shikh signalakh; stenogramma lektsii.
Leningrad, Leningr.dom nauchno-tekhn.propagandy, 1959. 38 p.
(MIRA 13:2)

(Transistors)

FEDOTOV, Aleksandr Ivanovich; BORTYAKOVA, N.I., red.; PULIN, L.I., tekhn.red.
~~SECRET~~

[Role of Tula workers in organizing industry, 1921-1925] Rol'
tul'skikh rabochikh v vosstanovlenii promyshlennosti, 1921-1925 gg.
Tul'skoe knizhnoe izd-vo, 1958. 106 p. (MIRA 12:2)
(Tula government--Industries)

FEDOTOV, A.I., aspirant

Calculating suspensions used in measuring instruments. Izv. vys.
ucheb.zav.; prib. no.2:93-101 '58. (MIRA 11:7)

1.Leningradskiy inistitut tochnoy mekhaniki i optiki.
(Measuring instruments)

TAYTS, Ye.I.; FEDOTOV, A.I.

Using diamond cutters in the instrument industry. Priborostroenie
no.9:23-24 S '62. (MIRA 15:9)
(Instrument industry) (Diamonds, Industrial)

KOSHUROV, B.V., kand. tekhn. nauk; PAVLYUCHUK, A.I.; TAYTS, Ye.I.;
FEDOTOV, A.I.; VAKSER, D.B., red.; FREGER, D.P., red. izd-
va; BELOGUROVA, I.A., tekhn. red.

[Use of diamond tools in the manufacture of machinery] Pri-
menenie almaznogo instrumenta v mashinostroenii; stenogramma
lektsii. Leningrad, Leningr. dom nauchno-tekhn. propagandy,
1963. 30 p. (MIRA 16:7)
(Diamonds, Industrial) (Metal cutting)

FEDOTOV, Aleksey Ivanovich; BELITSKAYA, E.I., red.

[Machining various materials with diamond tools] Obrabotka
almaznymi reztsami razlichnykh materialov. Leningrad,
1965. 33 p. (MIRA 18:4)

..., [A.I.]
"The use of Fernalinised Anti foot-and-Mouth-Disease Virus for
Cross Infection". Veterinariya, 1942, No. 12. (Bibliography for
Article Foot and Mouth Disease by A. I. S. Smorokhov, State Publishing
House for Agricultural Literature, Moscow, Leningrad, 1947.

SO: [REDACTED] U-1625, 11 January 1952

FEDOTOV, A. I.

FEDOTOV, A. I. (Lecturer) Novacaine blockade in pneumonia in horses.

So: Veterinariya; 23; 4; April 1946; Un:1.

TABCON

FEDOTOV, A. I., Dr. Vet. Sci.

"Physico-chemical and biological properties of cerebrospinal fluid
of cattle.

SO: Veterinariia 24(6), 1947, p. 19.

FEDOTOV, A. I.

(This should probably be FEDOTOV, A. I.
See Istopy Zhurnalnykh Statey, 1948, item 23761)

FA 31/49T72

USSR/Medicine - Horses, Diseases
Medicine - Tetanus, Antiserum

Jun 48

"A Cisternal Introduction of the Antitetanus
Serum for Treatment of Tetanus in Horses," A. I.
Fedotov, Dr Vet Sci, 2½ pp

"Veterinariya" No 6

Describes technique in detail. When antitetanus
serum was administered internally along with the
corresponding symptomatic treatment, 90% of
cases recovered.

31/49T72

FEDOROV, A. I.

This should probably be FEDOTOV instead of FEDOROV.
(Veterinariya, 25, No. 8, 1948, p. 46 & LITOPS

PA 31/49T102

~~Veterin~~/Medicine - Horses

Medicine - Tetanus, Prevention

Aug 48

"Review of N. G. Belen'kiy's Book, 'Tetanus in Horses and Its Control,'" A. I. Fedorov, Dr Vet Sci, 2½ pp

"Veterinariya" No 8

Belen'kiy's book was published in 1944. Fedorov states (1) that methods claimed as original by Belen'kiy were in reality developed by others, and (2) that some recommendations in book are unsound.

31/49T102

FEDOTOV, A. I.

D. I. Rozhnov. Infektsionnaya anemiya loshadey (Infectious Anemia in Horses). Arkhangel'sk. 1950. 24 pages with illustrations. (Veterinary Medicine Section of the Oblast Administration of Agriculture).

U-5235

FEDOTOV, A. I., Dr. of Vet. Sci., Prof.
Leningrad Scientific Institute of Vet. Med.
APPROVED FOR RELEASE Thursday, July 27, 2000 CIA-RDP86-00513R00041272
"Hemoagglutination with the erythrocytes of the blood of frogs in
infectious anemia of horses."
SO: Vet. 27 (6), 1950, p. 56

FEDOTOV, A. I.

"Veterinary liquorology"
Moscow-Leningrad. Sel 'khozgaiz, 1951. 180 pages with
illustrations.

SO: Vet., May 1952, Unclassified.

The author reports on the data of a series of works in the sphere of
veterinary liquorology, and also his personal observations in examinations
of liquor (blood fluid?) in agricultural animals.

FEDOTOV, A. I.

USSR/Medicine - Infectious Diseases
(Veterinary)

May 51

"Some Data on the Epizootology of Equine Infectious Anemia," Prof A. I. Fedotov, Dr Vet Sci

"Veterinariya" Vol XXVIII, No 5, pp 29-32

At isolated farms, epizootics of equine infectious anemia taper off and disappear within 2-3 yrs. Remaining horses are healthy and able to work. Mares which have latent form of the disease give birth to healthy foals.

LC

182175

FEDOTOV, A.I.

[Study of cerebrospinal fluid in veterinary science] Veterinarnaya likvorologiya. Moskva, Gos. izd-vo sel'khoz. lit-ry, 1951. 179 p. (MIRA 15:3)
(CEREBROSPINAL FLUID)

SHEDOTOV, A. I.

LENINGRAD PROVINCE-VETERINARY BACTERIOLOGY

Best inter-district veterinary and bacteriological laboratory of Leningrad Province.
Veterinariia 29 No. 7, 1952 July, p 7-10

(NOTE: same article listed in CTS # 49, 27 Nov 53 -- U-4810)

Monthly List of Russian Accessions, Library of Congress, October 1952. Unclassified.

FEDOTOV, A.I.

Ionov, P.S., Mukhin, V.G., Fedotov, A.I., Sharabrin, I.G., "Laboratory
Examinations in Veterinary Clinical Practice". Moscow, Agricultural
Publishing House, 1953. 252 pages with illustrations, price 7 rubles,
60 kopeks, bound, 15,000 copies. Textbook for higher agricultural educational
institutions.

SO: Veterinariya; Vol. 30; No. 7; July 1953 uncl de g
Trans. # 155 by L. Lulich

USSR / Diseases of Farm Animals. General Problems.

R

Abs Jour : Ref Zhur - Biol., No 22, 1958, No 101325

Author : Fedotov, A. I.

Inst : Turkmen Agricultural Institute.

Title : The Procurement of Live Bone Marrow Specimens from Farm Animals.

Orig Pub : Tr. Turkm. s.-kh. in-ta, 1957, 9, 235-238.

Abstract : The technique of sternal puncture performed in the area of the first 3 segments of the sternum is described. -- I. I. Magda.

Card 1/1

USSR / Diseases of Farm Animals: Diseases Caused by Viruses
and Rickettsiae

R

Abs Jour : Ref Zhur - Biologiya, No 2, 1959, No: 7440

Author : Fedotov, A. I.

Inst : Turkmen Institute of Agriculture

Title : Hemosiderocytes in the Peripheral Blood in
Spontaneous and Experimental Processes of Infectious
Anemia in Horses

Orig Pub : Tr. Turk. s.-kh. in-ta, 1957, 9, 269-275

Abstract : Hematologic examinations which were systematically
conducted by the author with the methods described by
him in order to discover hemosiderocytes (H) in horses
sick with infectious anemia (IA) (29), other diseases
(36) and completely healthy (57), showed that in
cases of acute and subacute IA forms H appear in the
blood on the 11th - 12th day of sickness and are
preserved in a quantity of 3 - 4 in 80 fields of vision

Card 1/2

USSR / Diseases of Farm Animals. Diseases Caused by Viruses
and Rickettsiae.

R

Abs Jour : Ref Zhur - Biologiya, No 2, 1959, No. 7440

until death of the animals occurs. In chronic IA processes, H quantity may become increased to 10 - 14 and more in 80 fields of vision depending upon the resistance of the organism and the remoteness of the completed relapse. In other diseases H is only found in cases of nuttalliosis, pneumonia and in surgical processes; hemosiderocytes were absent in healthy horses. -- L. S. Goberman

Card 2/2

FEDOTOV, A.I., prof., doktor vet. nauk

Peptone therapy and its theoretical prerequisites for use in
veterinary practice. Veterinariia 36 no.12:42-45 D '59.

(MIRA 13:3)

(Peptones--Therapeutic use)

FEDOTOV, A.I. (Doctor of Veterinary Sciences, Professor of the Yakutsk Agricultural Institute).

"Hemosiderocytes in the peripheral blood of horses in cases of infectious anemia..."

Veterinariya, vol. 39, no. 3, March 1962 pp. 23

L 35841-66

ACC NR: AP6015345

SOURCE CODE: UR/0119/66/000/005/0026/0027

AUTHOR: Fedotov, A. I. (Candidate of technical sciences); Kublanov, B. M.
(Engineer)

ORG: none

TITLE: Ten-digit contact printer

SOURCE: Priborostroyeniye, no. 5, 1966, 26-27

TOPIC TAGS: printer, contact printer, digit printer

ABSTRACT: A new contact printer with rotating type wheels has been developed in the North-Western Polytechnic Institute. Paper strip 1 (see figure) travels between striking hammer 2 and type wheel 3. The hammer strikes when electromagnet 4 receives a pulse; spring 6 restores the hammer position. The printer controlled by a computing-storage device is intended for operation with raster or interference-type transducers which measure strains, variation of linear dimensions, etc. The printer produces up to 20 lines per min. Its kinematic diagram and principal connection diagram are presented. Orig. art. has: 3 figures.

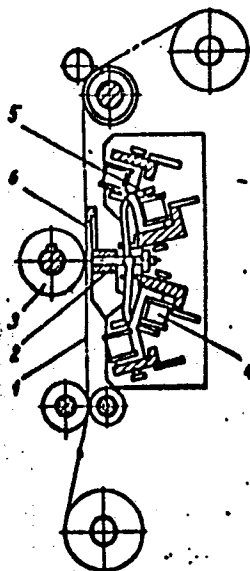
2
B

Card 1/2

UDC: 681.142.623

L 35841-66

ACC NR: AP6015345



Contact-printer mechanism

SUB CODE: 09 / SUBM DATE: none

Card 2/2

FEDOTOV, A.I.; ALEKSEYEV, M.V., inzh., rukovoditel' diplomnogo proyekta

Preventive measures in the production of vinyl chloride. Pozh.
bezop. no.3:21-27 '64. (MIRA 18:5)

FEDOTOV, A.M.

USSR/Medicine - Cholinesterase
Activity Nov/Dec 53

"The Neurohumoral Dynamics of Scarlet Fever," A. M. Fedotov, V. P. Braginskaya, T. S. Krasavina, Dept of Pathology and Infectious Diseases Clinic, Inst Pediatrics, Acad Med Sci USSR

Pediatr, No 6, pp 34-38

At the peak of acute manifestations of scarlet fever, high sympathomimetic activity of the blood, absence or low concn of acetylcholine (I), and increased cholinesterase activity of the serum are

275T27

are observed in most patients. Parasympathetic activity of the blood is exerted during the acute period when the acute processes taper off and there are suppurative complications or aggravations of chronic tonsillitis, otitis, etc. In the post-febrile period, there is a pronounced lowering of the sympathomimetic activity of the blood, an increase in the level of I, and often lowering of cholinesterase activity of the serum and of catalase activity of the erythrocytes. Later in the course of the disease there may be a secondary increase in the sympathomimetic activity of the blood accompanied by a drop in the level of I.

F E D O T O V, A.

KOCHERGIN, G.; CHEREMNYKH, M.; KONONTSEV, I.; MALIOVANOV, D.; MALEVICH, N.;
RATS, A.; LESIK, M.; KHOKHLOVKIN, D.; FEDOTOV, A.

Remarks on the book "Machines and equipment in mining." Vol. 1. "Mining
equipment." F.G.Boiko and others. Reviewed by G.Kochergin, M.Chernykh,
I.Konontsev, D.Maliovanov, N.Malevich, A.Rats, M.Lesik, D.Khokhlovkin,
A.Fedotov. Ugol' 29 no.11:46-48 '54.
(MLRA 7:11)

1. Glavnyy mekhanik Upravleniya po stroitel'stvu shakht v Donbasse Mini-
sterstva ugol'noy promyshlennosti SSSR (for Kochergin). 2. Glavnyy kon-
struktor Glavstroymekhanizatsii (for Chernykh). 3. Nachal'nik otdela
novykh mashin GUXS (for Konontsev). 4. Direktor instituta Giprosakhto-
stroy mash (for Maliovanov). 5. Glavnyy inzhener Giprosakhtostroy masha
(for Malevich). 6. Nachal'nik otdelov Giprosakhtostroy masha (for Rats,
Lesik & Khokhlovkin). 7. Glavnyy konstruktor Giprosakhtostroy masha (for
Fedotov).

(Coal--Mining machinery) (Boiko, F.G.)

MALEVICH, N.A., kandidat tekhnicheskikh nauk; FEDOTOV, A., inzhener.

V.K.Buchnev's book "The parameters of boring and blasting operations in the practice of progressive miners." Reviewed by N.A.Malevich, A.Fedotov. Ugol' 31 no.1:47-48 Ja '56.
(Mining engineering)(Buchnev, V.K.) (MIRA 9:4)

"APPROVED FOR RELEASE: Thursday, July 27, 2000

CIA-RDP86-00513R00041272

APPROVED FOR RELEASE: Thursday, July 27, 2000

CIA-RDP86-00513R00041272(

MALIOVANO, D.I., kandidat tekhnicheskikh nauk; ~~FAKTOBY~~ ~~FAKTOBY~~ inzhener.

Equipment for dry dust collection in borehole drilling. Ugol'
31 no.6:20-23 Je '56. (MLRA 9:8)

1. Giproshakhtostroymash.
(Boring machinery) (Mine dusts)

LESIK, M.P., inshener; FEDOTOV, A.H., inshener.

Highly productive PR-25 hammer drills. Shakht.stroi. no.1:17
Ja '57. (MIRA 10:7)

(Boring machinery)

FEDOTOV, A.N.

Pneumatic hammer drills in foreign countries. Gor. zhmr. no.1:49-57
Ja '57. (MIRA 10:4)

1. Giproskhakhtostroy Mash.
(Rock drills)

PHOTOV, A.N., inshener; KLIMOV, B.G., inshener.

Rotation-hammer hole drilling in foreign countries. Gor. zhur.

no.4:33-42 Ap '57.

(MLRA 10:5)

(Rock drills)

FEDOTOV, A.N., inzhener.

New pneumatic mounting and feeding columns for rock drills.
Shakht.stroi. no.9:16-19 S '57. (MIRA 10:10)

1.Gosudarstvennyy proyektno-konstruktorskiy institut po
proyektirovaniyu novykh mashin i mekhanizmov dlya gornopro-
khodcheskikh rabot.

(Rock drills--Pneumatic driving)

FEDOTOV, A.N.

AUTHOR: Fedotov, A.N., Engineer

127-12-24/28

TITLE: On the Article of R.P. Rzhondkovskiy "Air-Regulating Devices of Modern Drills" (Na stat'yu R.P. Rzhondkovskogo "Vozdukhora-spredeletel'nyye ustroystva sovremennykh perforatorov")

PERIODICAL: Gornyy Zhurnal, 1957, No 12, pp 69-70 (USSR)

ABSTRACT: This note is a review of R.P. Rzhondorskiy's article published in the Gornyy Zhurnal, 1957, No 1. The reviewer criticizes the definitions of the terms "valve" and "slide" proposed by Rzhondkovskiy and holds that the formulation given only adds to the confusion existing in technical literature on drills. Taking into account that distinctions between valves and slides are not always explicit, the reviewer is of the opinion that only the term "valve" should be used in every-day life and technical documentation, although in technical literature, valves and slides should be described separately. The reviewer holds that the article under consideration does not contain any new technical or scientific data, and its publication was not justified.

ASSOCIATION: Institute "Giproshakhtostroy mash".

AVAILABLE: Library of Congress
Card 1/1

AUTHOR: Fedotov, A.N., Engineer

127-58-4-8/31

TITLE: Working Characteristics of High-Speed Percussion Perforators
(Ob ekspluatatsionnykh kharakteristikakh bystroudarnykh perforatorov)

PERIODICAL: Gornyy Zhurnal, 1958, Nr 4, pp 30-35 (USSR)

ABSTRACT: The increase in mechanical speed of drilling blast holes and decrease of time for secondary operations are the basic ways to increase labor productivity. By graphic determinations, the author (Graph 1) describes the interdependence of conditions that give the best results with various perforators. There are 4 graphs, 2 tables, and 16 references, 15 of which are Soviet, and 1 German.

ASSOCIATION: Giproshakhtostroy mash

Card 1/1 1. Drilling machines - Operation 2. Mines - Equipment

MALIOVANOY, D. I., kand. tekhn. nauk; FEDOTOV, A. N., inzh.

Selecting PUR-3 dust collector parameters. Ugol' 33 no.4:20-24

Ap '58.

(MIRA 11:4)

(Mine dusts) (Dust collectors)

FEDOTOV, A. N., Candidate Tech Sci (diss) -- "Investigation of the factors affecting the selection of the parameters of a drill hammer with a pneumo-column". Moscow, 1959. 18 pp (Min Higher Educ USSR, Moscow Mining Inst im I. V. Stalin), 150 copies (KL, No 24, 1959, 142)

FEDOTOV, A.N., kand.tekhn.nauk; KOROL', L.B., inzh.

Blast holes should be bored using highly efficient light drill
rigs. Shakht.stroi. no.11:8-10 N '59. (MIRA 13:3)

1. Tsentral'nyy nauchno-issledovatel'skiy institut podzemshakhtostroy.
(Rock drills)

SULIN, V.A.; FEDOTOV, A.N.

Pulsed soldering bit. Priborostroenie no.10:29 0 '61.

(MIRA 14:9)

(Solder and soldering--Equipment and supplies)

FEDOTOV, A.N., kand.tekhn.nauk

Eliminate sickness due to vibration in workers engaged in blast hole
drilling. Bezop. truda v prom. 5 no. 5:8-11 My '61. (MIRA 14:5)
(Miners--Diseases and hygiene)

FEDOTOV, A.N., kand. tekhn. nauk; KOROL', L.B., inzh.

Choosing the parameters of a lightweight drilling rig. Shakht.
stroil. 5 no.9:14-17 S '61. (MIRA 16:7)

1. Vsesoyusnyy institut nauchnoy i tekhnicheskoy informatsii
Gosudarstvennogo komiteta Soveta Ministrov SSSR po koordinatsii
nauchno-issledovatel'skikh rabot i AN SSSR (for Fedotov).
2. Tsentral'nyy nauchno-issledovatel'skiy i proyektno-konstruktorskiy
institut podzemnogo shakhtnogo stroitel'stva (for Korol').
(Boring machinery)

KAPELYUSHNIKOV, German Isaakovich; KLITSUNOV, Viktor Igant'yevich;
MANEVICH, Veniamin Fayvovich; PANKRATOV, Yu.A., inzh., retsen-
zent; ZASADYCH, B.I., retsenzent; FEDOTOV, A.N., otv. red.;
OKHRIMENKO, V.A., red. izd-va; IL'INSKAYA, G.M., tekhn. red.

[Safety measures in underground coal mining] Tekhnika bezo-
pasnosti pri podzemnoi dobyche uгля. Moskva, Gos. nauchno-
tekhn. izd-vo lit-ry po gornomu delu, 1962. 503 p.

(MIRA 15:4)

(Coal mines and mining--Safety measures)

(Coal miners--Diseases and hygiene)

FEDOTOV, A.N.

Some considerations on the technical basis of the development
of scientific and technical libraries. NTI no.6:3-5 '63.
(MIRA '7:1)

FEDOTOV, Anton Nikolayevich. kand. tekhn. nauk; KOROL', Lev
Borisovich, inzh.

[Rock drills on pneumatic supports; light boring rigs]
Perforatory na pnevmopodderzhkakh; legkie burovyie usta-
novki. Moskva, Nedra, 1965. 219 p. (MJRA 18:9)

FEDOTOV, A.P., gornyy inzhener.

Mining above and under seams subject to sudden ejections. Ugol' 29 no.12:
17-21 D '54. (MIRA 8:1)

1. Vsesoyuznyy nauchno-issledovatel'skiy markshyderskiy institut.
(Coal mines and mining) (Mine gases)

FEDOTOV, A. P., CAND TECH SCI, "^{Study}~~INVESTIGATION~~ OF THE
RELATION ^{between} ~~OF~~ DEFORMABILITY OF COAL AND ROCK WITH THE MANI-
FESTATION OF ^{mining shocks upon} ~~THE~~ THE SHURAB LIGNITE DEPOSITS."
LENINGRAD, 1960. (MIN OF HIGHER AND SEC SPEC ED RSFSR.
LENINGRAD MIN INST IM G. V. PLEKHANOV). (KL, 2-61, 213).

-192-

BICH, Ya.A., kand.tekhn.nauk; FEDOTOV, A.P., inzh.

Basic properties of coal seams which determine their tendency
to rock bumping. Ugol' 36 no.1:31-34 Ja '61. (MIRA 14:1)
(Subsidence (Earth movements))

FEDOTOV, A.P., kand. tekhn. nauk

Study on models of the stress state of a massif near
workings and interpreting the results obtained. [Trudy]
VNIMI no.48:58-65 '62. (MIRA 16:6)

1. Vsesoyuznyy nauchno-issledovatel'skiy marksheyderskiy
institut.

(Rock pressure)

GOBOV, G. V.; KALIMBET, A. Z.; FEDOTOV, A. P.; SHEREMET'YEV, G. D.

Polarization of quasi-linear luminescence spectra of perylene
in an electric field at 77°K. Opt. i spektr. 13 no.6:879
D '62. (MIRA 16:1)

(Perylene—Spectra) (Electric fields)

FEDOTOV, A.P.; SHEMBEL', B.K.

~~SECRET~~
Instrument for the measurement of oscillation phase differences in
the decimeter wave range. Izv. vuzov. no. 6:43-45 N-D '55. (MLBA 9:3)
(Radio measurements)

"APPROVED FOR RELEASE: Thursday, July 27, 2000

CIA-RDP86-00513R00041272

APPROVED FOR RELEASE: Thursday, July 27, 2000

CIA-RDP86-00513R00041272(

S/142/60/000/003/007/017
E192/E482

AUTHORS: Fedotov, A.P. and Shembel', B.K.

TITLE: Preliminary Excitation of the Resonator of a Linear Accelerator Which is Fed from Oscillators

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Radiotekhnika, 1960, No.3, pp.350-358

TEXT: Many linear accelerators of heavy particles consist of a high-Q resonator which is fed from a group of oscillators through short sections of transmission lines. However, a system of this type can operate at many frequencies. Consequently, for the purpose of obtaining stable oscillations in the resonator, a quenching resistance is included in the transmission line (Ref.1 and 2), but a large portion of the oscillator power is lost in this resistance. The losses can be reduced by using the pre-excitation of the accelerator, this being done by means of an auxiliary oscillator at the principal oscillation mode. The problem of feeding the accelerators is analysed in detail. The system can be represented by the equivalent circuit shown in Fig.1, where an oscillator is represented by parameters ϵ and R_1 . It is

Card 1/7

S/142/60/000/003/007/017
E192/E482

Preliminary Excitation of the Resonator of a Linear Accelerator
Which is Fed from Oscillators

assumed that the natural frequencies of the resonator and of the tuned circuit of the oscillator are equal (f_0) and that the transmission line of length l is lossless. The coupling between the transmission line and the resonator of the accelerator is characterized by

$$\sigma = \frac{G_0}{G_p/n^2}$$

where G_0 is the wave admittance of the line, G_p is the equivalent to the resonator and $1/n$ is the transformation ratio for the input of the resonator. The coupling between the line and the resonant circuit of the oscillator is defined by

$$\eta_0 = \frac{m^2 G_0}{m^2 G_0 + G_K}$$

where one of m is the transformation ratio for the energy input.
Card 2/7

S/142/60/000/003/007/017
E192/E482

Preliminary Excitation of the Resonator of a Linear Accelerator
Which is Fed from Oscillators

The efficiency of the whole system η is defined as the ratio of the power in the resonator and the circuit of the oscillator. The system is further characterized by the stabilization coefficient for the oscillator which is equal to the ratio of the frequency change due to the influence of various effects in the absence of an external circuit to the frequency change due to the same parameters in the presence of the external circuit. The stabilization coefficient is defined by

$$K_c = 1 + \frac{\frac{dB_B}{d\delta}}{\frac{dB_K}{d\delta}} \quad (3)$$

where B_K is the susceptance of the resonant circuit, B_B is the susceptance and δ is the detuning of the system from f_0 . If the quenching conductance G_F in the system is represented by Fig.1, a single-frequency system is obtained for $G_F = 0$. When $l = k\lambda/2$,
Card 3/7

S/142/60/000/003/007/017
E192/E482

Preliminary Excitation of the Resonator of a Linear Accelerator
Which is Fed from Oscillators

B_B is expressed by Eq.(5), where Q_K is the quality factor of the resonant circuit of the oscillator without load and Q_p is the quality factor of the resonator without load. B_K is expressed by Eq.(7) so that the full susceptance at points k/k of Fig.1 is given by Eq.(7). The stabilization coefficient is therefore given by Eq.(8). If the length of the line is $\ell = (2k + 1) \lambda_0/4$, the stabilization coefficient is expressed by Eq.(9). From Eq.(8) and (9) it is seen that at f_0 , the stabilization coefficient is greater than unity for $\ell = k\lambda/2$ and less than unity for $\ell = (2k + 1)\lambda/4$. Thus, in the first case the external circuit has a stabilizing effect on the oscillator, whilst in the second case it destabilizes the system. Instead of the oscillator it is possible to use a resonant amplifier with an independent drive. This can be coupled fairly strongly with the resonator of the accelerator. Now the remaining oscillators can be operated at the required frequency which is determined by the amplifier (pre-exciter). This feeding system is analysed in some detail and the results are illustrated

Card 4/7

S/142/60/000/003/007/017
E192/E482

Preliminary Excitation of the Resonator of a Linear Accelerator
Which is Fed from Oscillators

in Fig.3. This shows the change of the input conductance of the pre-exciter line as a function of the coupling coefficient between the line and the resonator. It is seen that it is possible to choose such a coupling coefficient between the pre-exciter line and the resonator that the change of the input conductance in the line is comparatively small when the oscillators are connected to the system. When a quenching resistance is used in the system, ($G_F \neq 0$) is present, the susceptance of the external circuit at point k/k of Fig.1 is given by Eq.(10) where $2p = 2\pi(l_0/\lambda)$ and $g_F = (G_F)/(G_0)$. By analysing this expression together with the expression for B_K , it is found that with a high Q_p and a short transmission line it is nearly always possible to make the system operate at a single frequency. The resonance of the system of Fig.1 is achieved when $B_B = -B_K$. Graphically the resonance can be determined by the point of intersection by the curves representing Eq.(6) and (10). It is of interest to determine the pull-in bandwidth of the oscillator which operates

Card 5/7

S/142/60/000/003/007/017
E192/E482

**Preliminary Excitation of the Resonator of a Linear Accelerator
Which is Fed from Oscillators**

with the quenching resistance. The pull-in bandwidth for a single-frequency is defined as a range of the oscillation frequency which lies inside the passband of the resonator ($1/2 Q_p$). The pull-in bandwidth is given by Eq.(11), provided the stabilization coefficient of the system is greater than a certain limiting value. The pull-in bandwidth was investigated experimentally and the results are illustrated in Fig.5. From the curves of Fig.5, it is seen that the measured pull-in bandwidth was $0.15/Q_K$ while the calculated bandwidth for this case was $0.27/Q_K$. The operation of a pre-exciter oscillator with a quenching resistance and an oscillator was investigated experimentally. The power supplied by the pre-exciter was 7 W and that of the oscillator was 11.2 W. The coupling lines for each system were the same. It was found that a stable oscillation was possible when the power received by the resonator was 15 W and the power dissipated in the quenching resistance was 2.4 W. It is concluded therefore that this system has some advantages in comparison with the method based on a

Card 6/7

S/142/60/000/003/007/017
E192/E482

**Preliminary Excitation of the Resonator of a Linear Accelerator
Which is Fed from Oscillators**

pre-exciter using a resonance amplifier with an independent drive. V.V.Polyakov and V.G. Sud'yev helped in the experimental work described in the article. Various methods of pre-excitation were discussed with L.I. Bolotin, V.M. Ovsyannikov, V.I. Volkov and others. There are 5 figures and 8 references: 4 Soviet and 4 non-Soviet (one of which is translated into Russian).

ASSOCIATION: Institut khimicheskoy fiziki AN SSSR
(Institute of Physical Chemistry AS USSR)

SUBMITTED: May 15, 1959 (to NDVSh - Radiotekhnika i elektronika)
February 4, 1960 (to IVUZ - Radiotekhnika)

Card 7/7

9,4200 (also 1163)

21434
S/109/61/006/001/013/023
E140/E163

AUTHORS: Fedotov, A.P., and Shembel', B.K.

TITLE: Linear accelerator resonator as a load for
high-frequency oscillators

PERIODICAL: Radiotekhnika i elektronika, Vol.6, No.1, 1961,
pp. 108-116

TEXT: In linear standing wave accelerators heavily loaded by the beam of accelerated particles, the latter affects the amplitude and phase of the accelerating field in the resonator and the impedance presented to the high-frequency power supply. On the other hand, the amplitude and phase of the accelerating field determine capture of the particles in the resonator and thus the current in the accelerated particle beam. Interactions between the generator and the resonator are very strong and it has been proposed that at high beam loading the generator-accelerator system can be unstable. To investigate this problem the equivalent circuit of the system is considered. An experimental model of an accelerator consisting of a single-gap klystron buncher and a basic resonator was used. The apparatus is shown schematically in Card 1/5

21434

S/109/61/006/001/013/023
E140/E163

Linear accelerator resonator as a load for high-frequency oscillators

Fig.1, where the following notation is used: 1 - electron gun; 2 - buncher; 3 - basic resonator; 4 - energy spectrum analyzer; 5 - field amplitude indicator; 6 - phase meter; 7 - slotted line; 8 - frequency multiplier channel exciter; 9 - power division bridge; 10 - intermediate generator; 11 - final generator; 12 - phase inverter; 13 - auxiliary generator; 14 - attenuator; 15 - vacuum envelope (steel tube). The model satisfies two requirements: the power transferred by the basic resonator field to the beam constitutes a substantial portion of the power fed in (i.e. the basic resonator of the accelerator has a high efficiency) and the resonator is "long", i.e. the particles accelerated in it complete more than a period of oscillation. The equivalent circuit and the vector diagrams of the accelerator resonator loaded by the beam are given in Fig.2. Here ϵ and R_1 are generator parameters, I_p is the resonator current, R_3 is the real component of the unloaded resonator impedance and I_n is the beam current. The input impedance and stability conditions

Card 2/ 5

21434
S/109/61/066/001/013/023
E140/E163

Linear accelerator resonator as a load for high-frequency oscillators

are found. Acknowledgements are expressed to Yu.K. Solodkov, N.P. Popov, Ye.A. Sidorov, V.B. Stepanov and A.D. Grishin for their participation in the experimental part of the work, and to V.A. Teplyakov and G.M. Anisimov for advice. There are 6 figures, 1 table and 9 references: 8 Soviet and 1 English.

SUBMITTED: May 3, 1960

Card 3/5

24879

S/109/61/006/007/019/020
D262/D306

9.4220

AUTHORS: Fedotov, A.P., and Teplyakov, V.A.

TITLE: Requirements as to magnetic field amplitude and phase stability in resonant cavities of linear accelerators

PERIODICAL: Radiotekhnika i elektronika, v. 6, no. 7, 1961,
1205 - 1206

TEXT: Since the instability of amplitude and phase of magnetic fields in linear accelerators leads to the instability of longitudinal motion of the particle it should be reduced as much as possible. The authors are aware of one published work only dealing with this problem (Ref. 1: I.L. Zel'manov, A.S. Kompaneyets, Statisticheskiy razbroz faz v sisteme nezavisimyykh rezonatorov (Statistical Spread of Phases in a System of Independent Resonators) Otchet IKhF, AN SSSR, 1953). In the present short article the authors determine analytically the maximum phase and amplitude deviations allowed in an accelerating system of long resonators. A single long

Card 1/4